

REMARKS

In response to the Office Action dated June 2, 2004, Applicants respectfully request reconsideration of the rejections of the claims. The withdrawal of the previous grounds of rejection is noted with appreciation.

Claim 11 was objected to for the use of the word "its". In response thereto, the claim has been amended to remove the basis for the objection.

Claims 1-8 and 10-12 were rejected under 35 U.S.C. §103, on the grounds that they were considered to be unpatentable over two newly-cited references, namely EP 0 350 179 ("*Jarvis*") in view of U.S. 6,412,701 ("*Kohama*"). The rejection alleges that the *Jarvis* patent discloses most of the subject matter recited in the claims, with the exception of a few features for which the *Kohama* patent is cited. It is respectfully submitted, however, that the *Jarvis* patent does not disclose, nor otherwise suggest, the claimed invention to a person of ordinary skill in the art, whether considered by itself or in combination with the *Kohama* patent.

The Office Action discusses the teachings of the *Jarvis* patent, in the paragraph bridging pages 2 and 3 of the Action. Perhaps the most relevant part of this teaching appears in column 3, lines 40-54, which pertains to the example of Figure 2. In this example, labels 6, integrated circuit components 1, and a fluid resin fed through a nozzle 9 are coextruded in the required configuration into mould cavities that are formed by two recessed endless belts. Within the mould cavities, the resin material sets, to adhere the various items to one another, to form completed cards.

The Office Action does not indicate how this teaching relates to the specific language of the rejected claims. For instance, claim 1 recites the steps of providing

functional elements on a support sheet, and “extruding said covering layer immediately in contact with said support sheet.” In the card of the *Jarvis* reference, the labels 6 form the covering layers. As can be seen in Figure 1, these layers are not in immediate contact with the support sheet 7 upon which the electronic components are mounted. Rather, the basic teaching of the *Jarvis* reference is to interpose a hardenable material 8, such as a resin, between the electronic components and the labels 6. The Office Action does not indicate how the language of claim 1 might be interpreted to read upon this disclosure.

The *Kohama* patent does not overcome the distinctions between the *Jarvis* reference and the claims. It discloses the manufacture of IC modules by means of a hot pressing, i.e., lamination, technique. It does not suggest the use of an extrusion process, particularly one in which the covering layer of a card is extruded immediately in contact with a support sheet carrying the functional elements of the card.

The subject matter of new claim 16 is likewise not suggested by the teachings of the references. Among other steps, claim 16 recites that of extruding a flowable material directly onto opposite sides of the core substrate containing the chip and the antenna, by means of a sheet extrusion technique, to thereby form the top and bottom layers of the media. In the *Jarvis* reference, the labels 6 are not extruded as a flowable material. Rather, as can be seen in Figure 2, the labels are preformed prior to the time they are presented to the mould cavities 10. Only the hardenable resin 8 is in a flowable state during the coextrusion step. Furthermore, the labels 6 are not extruded directly onto the substrate containing the electronic components 1, 2.

For at least these reasons, therefore, it is respectfully submitted that the subject matter of claims 1 and 16, as well as their dependent claims 2-12 and 17-18, is not suggested by the teachings of the *Jarvis* reference, whether considered by itself or in combination with the *Kohama* patent.

Claims 9 and 14 recite a further feature of the invention, wherein the sheet that supports the functional elements has an opening through which the extruded top and bottom layers are joined to form a homogenous molecular continuity of the same material, i.e., a monolithic construction. This feature is also recited in new claim 17.

Recognizing that the *Jarvis* and *Kohama* references do not disclose such a feature, the Office Action relies upon the newly-cited *Melzer* et al. patent (U.S. 6,305,609). In particular, the rejection refers to the cavities or depressions 13 in the carrier film 8 that supports the modular elements 5. It is respectfully submitted, however, that the *Melzer* patent does not disclose, nor otherwise suggest, the subject matter recited in claims 9, 14 and 17. In particular, it does not disclose that the material that forms the covering layers for the data cards, namely the layers 3 and 4, is present within these cavities 13 to form a monolithic construction. Rather, the patent discloses that a leveling material 14, i.e., a *different* material, is interposed between the cover layers and the carrier film 8, to fill the cavities 13. See column 7, lines 28-35. This leveling material prevents the cover layers 3 and 4 from being joined within these cavities 13.

Accordingly, it is respectfully submitted that the subject matter of claims 9, 14 and 17 is not taught by the *Meltzer* patent, even when considered in combination with the *Jarvis* reference and the *Kohama* patent.

Claims 15 and 18 further recite that the opening is disposed within the interior of the winding that forms the antenna. The Office Action does not explain how the Meltzer patent is being interpreted relative to this claim language. The patent does not contain any disclosure that explains the relationship of the cavities 13 and the turns of the induction coil 7. For this additional reason, therefore, it is respectfully submitted that the subject matter of claims 15 and 18 is not taught by the references.

In view of the foregoing, it is respectfully submitted that all pending claims are patentably distinct from the cited prior art. Reconsideration and withdrawal of the rejections are therefore respectfully requested.

Respectfully submitted,

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